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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/802,449

03/16/2004

Carl M. Panasik

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07/10/2006

TEXAS INSTRUMENTS INCORPORATED

P O BOX 655474, M/S 3999

DALLAS, TX 75265

EXAMINER

D'AGOSTA, STEPHEN M

ART UNIT

PAPER NUMBER

2617

DATE MAILED: 07/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/802,449	<b>Applicant(s)</b> PANASIK ET AL.	
	<b>Examiner</b> Stephen M. D'Agosta	<b>Art Unit</b> 2617	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                                    | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Amendment*

1. The applicant's amendment appears below and new art has been applied.
2. The examiner believes that a **more favorable outcome** may occur if the applicant were to amend claim 1 as follows:

- **Claim 1 + Claim 2 + (any one claim from claims 5 thru 11)**
  - Note that claims 5 and 6 will also require intervening claim 3 as well.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1, 3-7, 12 and 14-17** rejected under 35 U.S.C. 103(a) as being unpatentable over Hartwell et al. US 2003/0071766 and further in view of Zmarthie US 2002/0193091 and Happ US 6,299,102.

As per **claims 1 and 12**, Hartwell teaches an automated emergency alert system (para. 39 teaches calling 911), comprising:

a portable communication device operable to initiate communication over a wireless telecommunications network (figure 3, #38 teaches mobile communications device);

a dynamic sensor operable to generate an acceleration profile for the handheld portable communication device (para. #37 teaches an accelerometer or gyroscope and para #39 teaches determining if a user crashes) ;

a memory operable to store one or more predefined acceleration profiles, each predefined acceleration profile associated with an emergency event (Para #39 teaches measuring the force of impact and comparing it to a threshold, which would be stored in memory, and reads on a profile);

one or more processors (figure 3, #30) collectively operable to:

receive from the dynamic sensor an acceleration profile/threshold for the handheld portable communication device AND access one or more predefined acceleration profiles/thresholds stored in the memory AND compare the acceleration profile/threshold received from the dynamic sensor to the one or more predefined acceleration profiles/thresholds stored in the memory to determine if the acceleration profile substantially matches a predefined acceleration profile/threshold in the one or more predefined acceleration profiles/thresholds AND if it is determined that the acceleration profile/threshold received from the dynamic sensor substantially matches a predefined acceleration profile/threshold in the one or more predefined acceleration profiles/thresholds stored in the memory, initiate a communication using the wireless telecommunications network to one or more emergency call centers to notify the emergency call center that the emergency event has occurred (Para. #39 teaches measuring and comparing the force of impact and then calling an emergency/911 center if the user does not respond, which resets the device to "normal").

**But is silent on handheld and portable communication device, the acceleration profile comprising a plurality of discretely sampled acceleration values taken at predetermined time intervals.**

Hartwell's main focus is on a person who is engaging in an activity that typically involves wearing a helmet (para #2), hence he has integrated all the electronics into said helmet for convenience. One skilled would also want this same type of emergency notification as they go through their everyday life and would locate it in a portable device that they carry with them all the time (eg. a cell phone, PDA, etc.).

Zmarthie teaches a portable/wearable device with accelerometer that generates a distress signal should the person wearing/carrying the device be rendered unable to communicate (abstract and Para. #59). Hence one skilled would use the distress system in device that can be worn or carried.

Happ teaches an emergency/accident sensor that samples the acceleration at distinct time intervals:

An electronic crash sensor according to this invention utilizes solid-state electronic accelerometers to provide 3-axis, mutually orthogonal aircraft acceleration data to a microprocessor-based controller. The crash sensor may have a mounted orientation in which sensor axes differ from aircraft X, Y and Z axes and is programmed to convert measured data to equivalent vehicle axis data. **The sensor periodically samples the acceleration signals from the accelerometers** and internal signals, converts them to digital format, converts them to vehicle equivalent accelerations, **and processes these signals under control of a crash-detection algorithm to detect a crash threshold.** By modifying key processing parameters from an external computer, **the controlling programs may be tailored to a variety of different vehicles and physical mounting orientations.**

It would have been obvious to one skilled in the art at the time of the invention to modify Hartwell, such that the device is handheld and samples at predetermined time intervals, to provide means for the device to be portable/wearable so that a user can carry it on their person (and not have to wear a helmet) and that the time intervals routinely check the person's movement to see if any appear to be dangerous.

As per **claims 3-4 and 14**, The combination teaches claim 1/12, wherein the handheld portable communication device further comprises a location receiver (eg. GPS recvr) operable to determine a location of the handheld portable communication device (figure 3, #34).

As per **claims 5 and 15**, The combination teaches claim 3/14, wherein the one or more processors are operable to: determine a velocity of the handheld portable communication device using the location receiver (GPS receivers can inherently determine velocity and Hartwell teaches determining the user's speed, location and direction, see Para #37) ; and in addition to determining whether the acceleration profile received from the dynamic sensor substantially matches a predefined acceleration profile stored in the memory, use the determined velocity to determine whether an emergency event has occurred (Para. #39 teaches using the accelerometer to determine crash impact but speed, location and direction would also be used).

As per **claims 6 and 16**, The combination teaches claim 3/14, wherein the one or more processors are further operable to communicate location information identifying the location of the handheld portable communication device to the one or more emergency call centers if it is determined that the acceleration profile received from the dynamic sensor substantially matches a predefined acceleration profile stored in the memory (para #39 teaches sending the location of the user to the emergency center per the GPS location).

As per **claims 7 and 17**, The combination teaches claim 1/12, wherein one or more components in the wireless communication network are operable to determine a location of the handheld portable communication device in compliance with an enhanced 911 (E911) mandate and to communicate this location to the emergency call center (Para #39 teaches sending location information to a 911 emergency center).

**Claims 2 and 13** rejected under 35 U.S.C. 103(a) as being unpatentable over Hartwell/Zmarthie/Happ and further in view of Memsic Cell phone Accelerometers/Sensors.

As per **claims 2 and 13**, The combination teaches claim 1/12 **but is silent on** wherein the dynamic sensor comprises an on-chip accelerometer.

Memsic teaches an on-chip accelerometer that can be used in a cell phone (see IDS document, pages 1-3 which discloses a cell phone with an on-board accelerometer).

It would have been obvious to one skilled in the art at the time of the invention to modify The combination, such that it is a dynamic sensor comprises an on-chip accelerometer, to provide means for the device to be small enough to be integrated into lightweight devices such as cell phones, PDA's, etc..

**Claims 8-9 and 18** rejected under 35 U.S.C. 103(a) as being unpatentable over Hartwell/Zmarthie/Happ and further in view of Alpert US 5,742,666.

As per **claims 8 and 18**, The combination teaches claim 1/12 **but is silent on** wherein: the memory is further operable to store one or more prerecorded emergency event messages, each event message associated with one or more emergency events; and the one or more processors are further operable to communicate a prerecorded event message to the emergency call center when a substantial match is determined.

Alpert teaches a cell phone that can detect a crash and send a prerecorded message to an emergency center:

The controller has one memory that stores a pre-programmed telephone number corresponding to an emergency responder and a second memory that stores a pre-recorded emergency message including identification information associated with the user of the telephone. A microphone provides voice signals to the controller when the user speaks into it. The controller detects a distress situation based on inputs from the emergency input key and the crash detector, and then accesses the first memory to get the telephone number which is used to access the message from the second memory, which is then played repeatedly until the voice messages are played. (abstract)

The examiner notes that the claim is broadly written such that Hartwell's device does read on determining an emergency and sending a message (eg. location) to the emergency center whereas Alpert sends a prerecorded message that matches an event (eg. a crash).

It would have been obvious to one skilled in the art at the time of the invention to modify The combination, such that the memory stores one or more prerecorded emergency event messages, each event message associated with one or more emergency events; and the one or more processors are further operable to communicate a prerecorded event message to the emergency call center when a substantial match is determined, to provide means for sending pertinent data to an emergency center based on what actually happened (eg. the user was traveling at a certain rate and had an impact of a certain force).

As per **claim 9**, The combination teaches claim 1 **but is silent on** wherein: the memory is further operable to store prerecorded user information regarding a user associated with the handheld portable communication device; and the one or more processors are further operable to communicate the prerecorded user information regarding the user to the emergency call center when a substantial match is determined.

Alpert teaches a cell phone that can detect a crash and send a prerecorded message to an emergency center:

The controller has one memory that stores a pre-programmed telephone number corresponding to an emergency responder and a second memory that stores a pre-recorded emergency message including identification information associated with the user of the telephone. A microphone provides voice signals to the controller when the user speaks into it. The controller detects a distress situation based on inputs from the emergency input key and the crash detector, and then accesses the first memory to get the telephone number which is used to access the message from the second memory, which is then played repeatedly until the voice messages are played. (abstract)



Art Unit: 2617

It would have been obvious to one skilled in the art at the time of the invention to modify The combination, such that memory is stores prerecorded user information regarding a user associated with the handheld portable communication device; and the one or more processors are further operable to communicate the prerecorded user information regarding the user to the emergency call center when a substantial match is determined, to provide means for sending user-specific info to the emergency center.

**Claims 10 and 19** rejected under 35 U.S.C. 103(a) as being unpatentable over Hartwell/Zmarthie/Happ and further in view of Teller US 2002/0013538.

As per **claims 10 and 19**, The combination teaches claim 1/12, **but is silent on** further comprising a temperature sensor operable to monitor a temperature near the handheld portable communication device, the one or more processors further operable to: receive from the temperature sensor temperature information regarding the temperature near the handheld portable communication device; and if the information received indicates that the temperature near the handheld portable communication device exceeds a predefined threshold temperature, communicate a message regarding the temperature to the one or more emergency call centers.

Teller teaches a wireless emergency sensing device that uses a temperature sensor:

the sensor unit comprises a temperature sensor that is attached to the individual and produces a temperature signal; the temperature signal provides an indication of whether the individual is in a safe or emergency temperature condition; and the step of producing a health signal comprises producing a temperature signal that indicates a temperature characteristic of the individual. (see claim 10)

It would have been obvious to one skilled in the art at the time of the invention to modify The combination, such that comprising a temperature sensor operable to monitor a temperature near the handheld portable communication device, to provide means for measuring many different types of environmental conditions which can be dangerous to the user if near said condition(s).

Art Unit: 2617

**Claims 11 and 20** rejected under 35 U.S.C. 103(a) as being unpatentable over Hartwell/Zmarthie/Happ and further in view of Harderer et al. US 2003/0071446.

As per **claims 11 and 20**, The combination teaches claim 1/12, **but is silent on** further comprising a water sensor operable to monitor whether the handheld portable communication device is under water, the one or more processors further operable to: receive from the water sensor information regarding whether the handheld portable communication device is under water; and if the information received indicates that the handheld portable communication device is under water, communicate a message indicating that the handheld portable communication device is under water to one or more emergency call centers.

Haderer teaches a device to determine if a person driving an automobile is in/under water:

In addition, with the third occupant protection system, in the event of an accident the belt locks 32 are open for example electromagnetically, so that the occupant after an accident in the vehicle, in particular under water, can easily escape. The moisture sensor 53 for detection of penetrating water is integrated in the printed circuit board of a control device 10 which controls the belt locks 32 or alternatively can be formed as a float in a foot region of the inner space 2. (Para #28).

Since Hartell discloses an “environmental interaction sensor” (Para #28), this broadly reads on measuring any environmental condition, to include the user being in/under water.

It would have been obvious to one skilled in the art at the time of the invention to modify the combination, such that comprising an under water sensor, to provide means for measuring many different types of environmental conditions which can be dangerous to the user if near said condition(s).

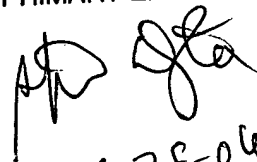
**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen M. D'Agosta whose telephone number is 571-272-7862. The examiner can normally be reached on M-F, 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bill Trost can be reached on 571-272-7872. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

STEVE M. D'AGOSTA  
PRIMARY EXAMINER



6-28-06